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KENYON & KENYON  
Suite 700  
1500 K Street, N.W.  
Washington, DC 20005

EXAMINER

SHECHTMAN, SEAN P

ART UNIT PAPER NUMBER

2125

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/796,028

Applicant(s)

ANDO, HIROYOSHI

Examiner

Sean P. Shechtman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 41-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 41-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 09/811,714.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/10/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 41-56 are presented for examination. Claims 43, 48-50, 52, 54, and 56 have been amended.

#### ***Drawings***

2. Objections withdrawn due to the amendment.

#### ***Specification***

3. The disclosure is objected to because of the following informalities: Referring to paragraph 1, line 1, the examiner respectfully submits that 6,751,514 is a patent number and not an application number. The examiner respectfully submits that a statement reading "This is a continuation of Application No. 09/811,714, filed March 19<sup>th</sup> 2001, now Patent No. 6,751,514", would more accurately describe the necessary reference to the prior application. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 41-56 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

4. Referring to claims 41-42, and 49, the original specification fails to provide enable for how one skilled in the art can make or use inspection information or manufacturing information

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obtained or stored with regards to security of an apparatus control computer. The original specification teaches “it is possible to connect in direct the control computer of the apparatus to the communication network to give permission, namely to operate the user support system, but it is desirable from the viewpoint of security to avoid direct connection of the apparatus control computer storing the user information to the external communication network” in pages 6-7.

The original specification further teaches that a host computer confirms a user ID in pages 18-19.

The examiner respectfully submits that, nowhere, in the original specification, is there any mention of, how one of ordinary skill in the art can make or use inspection information obtained with regards to security of an apparatus control computer, in fact, the specification is completely silent as to even mention any security related to a user ID, much less, how inspection information can be obtained with regards to security of an apparatus control computer.

5. Referring to claim 43, the original specification fails to provide enable for how one skilled in the art can make or use easy transportation in regards to security.

6. Referring to claims 48 and 50, the original specification fails to provide enable for how one skilled in the art can make or use running information stored or received in regards to security of the apparatus control computer.

7. Referring to claims 48, 50, the original specification fails to provide enable for how one skilled in the art can make or use manufacturing apparatus in regards to security of an apparatus control computer.

8. Referring to claims 48, 50, the original specification fails to provide enable for how one skilled in the art can make or use inspection apparatus in regards to security of an apparatus control computer.

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9. Referring to claims 48, and 52, the original specification fails to provide enable for how one skilled in the art can make or use physical memory medium in regards to security of an apparatus control computer.

10. Referring to claim 50, the original specification fails to provide enable for how one skilled in the art can make or use transmitted running information received in regards to security of an apparatus control computer.

11. Referring to claim 52, the original specification fails to provide enable for how one skilled in the art can make or use apparatus control computer transmitting information in regards to security of the apparatus control computer.

12. Referring to claim 52, the original specification fails to provide enable for how one skilled in the art can make or use exclusive server in regards to the security of the apparatus control computer.

Therefore the examiner is unable to determine the metes and bounds of all of the above limitations in the claims and the prior art rejection below is based on the claims as best interpreted by the examiner.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 41-56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claims 41-56 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph. The claim(s) are narrative in form and replete with indefinite and

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functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

14. Referring to claim 48, it is not clear what is required to be done in regards to security of an apparatus control computer. Is the running information stored in regards to security of the apparatus control computer or is the physical memory medium in regards to security of an apparatus control computer?

15. Referring to claim 50, it is not clear what is required to be done in regards to security of an apparatus control computer. Is the running information stored in regards to security of the apparatus control computer, or is the transmitted running information received in regards to security of an apparatus control computer?

16. Referring to claim 52, it is not clear what is required to be done in regards to security of an apparatus control computer. Is said apparatus control computer transmitting information in regards to security of the apparatus control computer, or is said exclusive server in regards to the security of the apparatus control computer?

17. Referring to claim 41, it is not clear what is required to store user information, –said manufacturing apparatus, a physical memory medium, or an apparatus control computer?

18. Referring to claim 42 it is not clear what is required to store user information, –said inspection apparatus, a physical memory medium, or an apparatus control computer?

19. Referring to claim 48 it is not clear what is required to store user information, –said manufacturing apparatus, said inspection apparatus, a physical memory medium, or an apparatus control computer?
20. Referring to claim 49 it is not clear what is required to store user information, –said manufacturing apparatus, said inspection apparatus, a physical memory medium, or an apparatus control computer?
21. Referring to claim 50 it is not clear what is required to store user information, –said manufacturing apparatus, said inspection apparatus, or an apparatus control computer?
22. Referring to claim 52 it is not clear what is required to store user information, –a physical medium or an apparatus control computer?
23. Referring to claim 48, it is not clear what information is required to be difficult, - the manufacturing information or the inspection information?
24. Referring to claim 50, it is not clear what is required to store manufacturing or inspection information, - the read device or the physical memory medium?
25. The term "easily" in claim 43 is a relative term which renders the claim indefinite. The term "easily" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The specific requirements of the transport have been rendered indefinite by the use of the term easily.

Examiner further invites the applicant's attention to The MPEP 2173.05(a), which clearly states, in part:

“The meaning of every term used in a claim should be apparent from the prior art or from the specification and drawings at the time the application is filed. Applicants need not

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confine themselves to the terminology used in the prior art, but are required to make clear and precise the terms that are used to define the invention whereby the metes and bounds of the claimed invention can be ascertained.”

Due to the number of 35 USC § 112 rejections, the examiner has provided a number of examples of the claim deficiencies in the above rejections, however, the list of rejections may not be all inclusive. Applicant should refer to these rejections as examples of deficiencies and should make all the necessary corrections to eliminate the 35 USC § 112 problems and place the claims in proper format.

Due to the vagueness and a lack of clear definition of the terminology and phrases used in the specification and claims, the claims have been treated on their merits as best understood by the examiner.

### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

26. Claim 49 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,014,208 to Wolfson.

Referring to claim 49, Wolfson teaches a manufacturing/inspection apparatus for manufacturing/inspecting a semiconductor device, comprising: a memory device for storing manufacturing/inspection difficulty information of said semiconductor device inspected with said inspection apparatus in a physical memory medium (Col. 15, lines 10-50) in regards to security of the apparatus control computer storing the user information (Col. 8, lines 23-25; Col. 10, line 55 – Col. 11, line 2); and a transmitting unit for transmitting the running information of said manufacturing/inspection apparatus (Col. 8, lines 26-35). The claim, as such, does not



require that the difficulty information be difficulty of service. The claims and specification, as such, do not require ascertaining a level or degree of difficulty. The claim, as such, does not require any functional relationship between the transmitting unit and the manufacturing/inspection apparatus. The claim, as such, does not require security from any specific threat, or any type of security apparatus/means or barrier to be implemented. The claim, as such, does not require transmitting the running information from anywhere or to anywhere.

27. Claims 43-45, and 49 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,385,497 to Ogushi.

Referring to claim 49, Ogushi teaches a manufacturing/inspection apparatus for manufacturing/inspecting a semiconductor device, comprising: a memory device for storing manufacturing/inspection difficulty information of said semiconductor device inspected with said inspection apparatus in a physical memory medium (Col. 3, lines 51-54; Col. 3, lines 2-3; Col. 4, lines 33-47) in regards to security of the apparatus control computer storing the user information (Fig. 6; Col. 6, lines 15-59); and a transmitting unit for transmitting the running information of said manufacturing/inspection apparatus (Co. 3, lines 46-54). The claim, as such, does not require that the difficulty information be difficulty of service. The claim, as such, does not require any functional relationship between the transmitting unit and the manufacturing/inspection apparatus. The claim, as such, does not require security from any specific threat, or any type of security apparatus/means or barrier to be implemented.

Referring to claim 43, Ogushi teaches a manufacturing/inspection apparatus for manufacturing or inspecting a semiconductor device product, said apparatus comprising: a

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memory device for storing running information indicating running conditions of said manufacturing/inspection apparatus (Col. 3, lines 38-39), wherein said memory device is a memory medium that can be transported easily in regards to security of an apparatus control computer storing the user information (Col. 6, lines 28-59). The examiner respectfully submits that pieces of process information do not require all pieces of process information, and therefore, the claim limitations are believed to be met. The examiner respectfully asserts that a computer can be transported easily.

Referring to claim 44, Ogushi teaches the manufacturing/inspection apparatus according to claim 43, further comprising a transmitting unit provided to read and transmit the information stored in said memory device (Col. 6, lines 28-59). Referring to claim 45, Ogushi teaches the manufacturing/inspection apparatus according to claim 44, wherein said transmitting unit is connected to a wide area communication network (Col. 5, lines 47-54).

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

28. Claims 41-42, 48, and 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,131,052 to Ban in view of U.S. Pat. No. 6,385,497 to Ogushi.

Referring to claims 41-42, Ban teaches a service method for use with a manufacturing/inspecting apparatus for manufacturing a semiconductor device product, comprising: inspection information of said products manufactured/inspected with said manufacturing/inspecting apparatus is obtained via a physical memory medium or an information communication network (Col. 3, lines 31-33; Col. 3, lines 22-23; Col. 2, lines 65-

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66), operating conditions of said manufacturing/inspecting apparatus are controlled based on said inspection information (Col. 4, lines 10-21; Col. 9, lines 5-22), running information of said manufacturing/inspecting apparatus is obtained via the information communication network (Col. 6, lines 3-7; Col. 8, lines 38-50), and the charge for use of said manufacturing/inspecting apparatus is determined based on said running information and inspection information (Col. 10, lines 32-35, 48-63, and 9-13).

Referring to claim 48, Ban teaches the charge for use of a semiconductor device manufacturing/inspection apparatus is set based on a memory device for storing manufacturing/inspection difficulty information and running information (Col. 3, lines 31-44, and lines 21-23; Col. 10, lines 49-50; Col. 10, lines 58-63; Col. 7, lines 39-43 and 2-4; Col. 6, lines 3-7; Col. 8, lines 38-50; Col. 11, lines 47-49), wherein a transmitting unit is provided to transmit the information stored in said memory device (Col. 3, lines 31-37; Col. 6, line 9), wherein said transmitting unit is connected to a wide area communication network (Col. 6, lines 12-13).

Referring to claims 50-51, Ban teaches said service system further comprises a read device for reading data of a physical memory medium storing the manufacturing or inspection difficulty information of said product manufactured or inspected with said manufacturing/inspection apparatus (Col. 6, lines 7-17), a receiving unit for receiving the transmitted running information of said manufacturing/inspection apparatus and an arithmetic device for setting the charge for use of said manufacturing/inspection apparatus based on said data of said physical memory medium and said running information (Col. 6, line 17; Col. 9, lines

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5-22; Col. 10, line 57). Further comprising a transmitting unit or transmitting a charge preset by said arithmetic device (Col. 6, lines 7-17).

Referring to claims 52, Ban teaches a service system, comprising an apparatus control computer of a semiconductor device manufacturing/inspection apparatus (Abstract; Col. 1, lines 10, and 58-59; Col. 2, lines 42-46) for collecting running information (see list below), also comprising a computer having a function (Col. 10, line 57) to calculate the charge for use of an apparatus for manufacturing semiconductor wafers and semiconductor devices based on apparatus running information (Col. 8, lines 39-50), said control computer further comprising a database for receiving via a communication network and storing said collected apparatus running information, product grade information and apparatus condition information (Col. 6, lines 3-19; Col. 3, lines 21-44), said service system further comprising a computer for calculating the charge for use of said manufacturing/inspection apparatus based on the information stored in said database (Col. 6, line 17; Col. 9, lines 5-22; Col. 10, lines 32-35, 48-63, and 9-13), said service system further comprising a computer for extracting maintenance (Col. 3, lines 21-30) and tuning work (Col. 4, lines 10-20) required for said manufacturing/inspection apparatus based on the information stored in said database, said service system further comprising a computer for analyzing discrepancy factors of said manufacturing/inspection apparatus based on the information stored in said database (Col. 3, lines 55-65). Referring to claim 53, Ban teaches a storage medium is provided to each lot (Col. 3, lines 31-44) directly attached to a cassette (Col. 5, lines 15-17).

Ban does teach a calculation for the charge for use of the apparatus in Col. 10, lines 8-63. Ban teaches determining whether or not the wafers or lot deserves to be completed in terms of

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the cost (i.e., calculation of cost). Ban goes on to teach a mathematical expression (i.e., calculation) for making this determination in terms of cost in Col. 10, lines 40-57. Examiner respectfully submits that the sum of the costs for each step “Cp” times the yield “Yn” at the end of the nth step times the number of chips per wafer “N”, is a charge for use of the apparatus. Ban does teach an external communication network in Col. 6, lines 12-13. Ban teaches the computer is connected to a network. Furthermore, Ban teaches a host computer serving information outside (i.e., external) of the storage equipment (Col. 8, lines 39-50; Fig. 6 and 7) through the network (col. 9, lines 14-15).

Referring to claims 41-42, 48, and 50-53, Ban teaches all of the limitations set forth above, however, Ban fails to teach security of an apparatus control computer. Furthermore, Ban fails to teach that control computer is connected to the communications network via a server.

However, Ogushi teaches analogous art in a semiconductor manufacturing apparatus (Col. 1, lines 8-15; Fig. 8; Col. 2, lines 59-68; Col. 3, lines 1-3 of '497), wherein the network is securely connected to the internet (Col. 3, lines 30-34 of '497) via a server (Col. 3, lines 15-29 of '497).

Therefore, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to combine the internet connection means via a server of Ogushi with the system of Ban. One of ordinary skill in the art would have been motivated to combine these references because Ogushi teaches the ability to: immediately and efficiently perform maintenance of industrial equipments installed at remote locations; monitor an operating state of one or a plurality of industrial equipments, and manage maintenance of the industrial equipment while communicating information associated with maintenance of the industrial equipment with

the monitor means through the internet; detect occurrence of trouble of the equipment; and perform centralized maintenance (Col. 1, lines 31-68, and Col. 2, lines 1-6 of '497).

29. Claims 41-42, 48, and 50-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,249,776 to Bajuk in view of U.S. Pat. No. 6,385,497 to Ogushi.

Referring to claims 41-42, 48, and 50-56, Bajuk discloses a service method of using a manufacturing apparatus for manufacturing/inspecting semiconductor devices (Fig. 5; Col. 1, lines 48-67; Col. 3, lines 18-23) wherein inspection information of said products manufactured/inspected with said manufacturing/inspecting apparatus is obtained via a physical memory medium or an information communication network (Col. 12, lines 33-56; Col. 7, lines 15-33 and lines 53-60), operating conditions of said manufacturing/inspecting apparatus are controlled based on said inspection information (Col. 7, lines 39-46), running information of said manufacturing/inspecting apparatus is obtained via the information communication network (Col. 12, lines 53-55), and the charge for use of said manufacturing/inspecting apparatus is determined based on said running information and inspection information (Abstract; Col. 7, lines 56-60; Col. 9, lines 49-52), wherein the charge for use of a semiconductor wafer and semiconductor device manufacturing/inspection apparatus is set based on manufacturing/inspection difficulty information of the following: a) Process information indicating the quantity of manufactured or inspected products (Col. 2, lines 29-33), b) Accuracy information indicating the manufacturing or inspection accuracy of said products (Col. 11, line 56 - Col. 12, lines 9), c) Running information indicating the running conditions of said manufacturing/inspection apparatus (Col. 2, lines 20-28) and d) Calibration information

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indicating a calibration value required for apparatus running control (Col. 7, lines 47-52), wherein any of the at least any information is stored in a memory device at the time of manufacture or inspection of said manufacturing/inspection apparatus, wherein a transmitting unit or transmitting a charge preset by an arithmetic device is provided to transmit the information stored in said memory device, wherein said transmitting unit is connected to a wide area communication network (Col. 12, lines 39-43; Col. 12, lines 49-56), wherein said service system further comprises a read device for reading data of a physical memory medium storing the manufacturing or inspection difficulty information of said product manufactured or inspected with said manufacturing/inspection apparatus, a receiving unit for receiving the transmitted running information of said manufacturing/inspection apparatus and an arithmetic device for setting the charge for use of said manufacturing/inspection apparatus based on said data of said physical memory medium and said running information (Col. 12, lines 33-56), further comprising an apparatus control computer of a semiconductor wafer and semiconductor device manufacturing/inspection apparatus (Fig. 5; Col. 1, lines 48-67; Col. 3, lines 18-23) for collecting the following information, also comprising a computer having a function to calculate the charge for use of an apparatus for manufacturing semiconductor wafers and semiconductor devices based (Fig. 5; Col. 1, lines 48-67; Col. 3, lines 18-23; Col. 6, lines 56-63) the following information: a) Apparatus running information including the number of sheets processed (Fig. 1D; Col. 4, line 38), b) Product grade information (Fig. 1D; Col. 6, lines 29-55; Col. 7, lines 47-52), c) Apparatus condition information (Fig. 1D; Col. 6, lines 29-55; Col. 7, lines 47-52), said control computer further comprising a database for receiving via a communication network and storing said collected apparatus running information, product grade information and apparatus

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condition information (Col. 6, lines 66-67), said service system further comprising a computer for calculating the charge for use of said manufacturing/inspection apparatus based on the information stored in said database (Col. 6, lines 56-67; Col. 12, lines 39-43), said service system further comprising a computer for extracting maintenance (Col. 4, lines 9-15) and tuning work (Col. 11, lines 6-10) required for said manufacturing/inspection apparatus based on the information stored in said database, said service system further comprising a computer for analyzing discrepancy factors of said manufacturing/inspection apparatus based on the information stored in said database (Col. 10, lines 48-55), wherein a GUI display connected to said computer includes the information pieces of at least (Figs. 1D, 2A, and 2B; Col. 6, lines 64-67), (1) number of sheets of wafer or mask to be processed; (2) total number of shots per wafer or mask; (3) class of product grade specified with size accuracy, position accuracy and alignment accuracy; (4) apparatus condition information defined with various residues of calibration and compensation; and (5) display of charge for use of apparatus calculated from the above information or notification of permission for use of an apparatus, (6) accumulated use time of limited-life part, (7) accuracy items of which deterioration is recognized with the calibration history, (8) generated error record and recovery condition, (9) exchange timing of the limited-life part estimated from the accumulated use time information of limited-life part, (10) adjustment and calibration means for the control items of which deterioration is recognized, and (11) apparatus discrepancy portion estimated from such error information, (12) accuracy deteriorated portion estimated from the calibration history, and (6) adjustment requiring portion and adjusting method estimated from the above information pieces, wherein a representative hardware environment for the invention includes peripheral devices such as disk units (Col. 12, lines 43-



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56). Examiner respectfully asserts that it is well known that such disk units can be easily transported.

Bajuk also teaches a calculation for the charge for use of the apparatus in the abstract, Col. 7, lines 27-68, Col. 8, lines 1-20, and Col. 11, lines 11-21. Bajuk teaches an invention that “results in more accurate costing of the entire semiconductor processing sequence” (Col. 7, lines 56-60). Bajuk even goes on to teach a calculated “cost per wafer”, for example \$8.01 (Col. 8, lines 8-10). Examiner respectfully submits that this cost (among others such as cost per step or operation also discussed in Col. 7, lines 60-68) is a cost or charge for using the apparatus, for example, on a per wafer basis.

Referring to claims 41-42, 48, and 50-56, Bajuk teaches all of the limitations set forth above, however, Bajuk fails to teach that the apparatus control computer is connected to the communications network via a server and Bajuk fails to teach security of an apparatus control computer.

However, Ogushi teaches analogous art in a semiconductor manufacturing apparatus (Col. 1, lines 8-15; Fig. 8; Col. 2, lines 59-68; Col. 3, lines 1-3 of '497), wherein the network is securely connected to the internet (Col. 3, lines 30-34 of '497) via a server (Col. 3, lines 15-29 of '497). Therefore, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to combine the server of Ogushi with the system of Bajuk. One of ordinary skill in the art would have been motivated to combine these references because Ogushi teaches the ability to: immediately and efficiently perform maintenance of industrial equipments installed at remote locations; monitor an operating state of one or a plurality of industrial equipments, and manage maintenance of the industrial equipment while communicating

information associated with maintenance of the industrial equipment with the monitor means through the internet; detect occurrence of trouble of the equipment; and perform centralized maintenance (Col. 1, lines 31-68, and Col. 2, lines 1-6 of '497).

30. Claims 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,385,497 to Ogushi in view of U.S. Patent No. 6,249,776 to Bajuk or U.S. Patent No. 6,131,052 to Ban.

Referring to claims 46-47, Ogushi teaches all the limitations set forth above, however, Ogushi fails to teach the manufacturing/inspection apparatus above, wherein a charge for use of said manufacturing/inspection apparatus is set based on the information transmitted by said transmitting unit or stored in said memory device.

However, referring to claims 46-47, Ban teaches analogous art, wherein a charge for use of a manufacturing/inspection apparatus is set based on the information transmitted by a transmitting unit or stored in a memory device, such as, a) Process information (Col. 3, lines 31-44, and lines 21-23) indicating the quantity of manufactured or inspected products (Col. 10, lines 49-50; Col. 10, lines 58-63), b) Accuracy information indicating the manufacturing or inspection accuracy of said products (Col. 7, lines 39-43 and 2-4), c) Running information indicating the running conditions of said manufacturing/inspection apparatus (Col. 6, lines 3-7; Col. 8, lines 38-50) and d) Calibration information indicating a calibration value required for apparatus running control (Col. 11, lines 47-49).

However, referring to claims 46-47, Bajuk teaches analogous art, wherein a charge for use of a manufacturing/inspection apparatus is set based on the information transmitted by a transmitting unit or stored in a memory device, such as, a) Process information indicating the quantity of manufactured or inspected products (Col. 2, lines 29-33), b) Accuracy information indicating the manufacturing or inspection accuracy of said products (Col. 11, line 56 - Col. 12, lines 9), c) Running information indicating the running conditions of said manufacturing/inspection apparatus (Col. 2, lines 20-28) and d) Calibration information indicating a calibration value required for apparatus running control (Col. 7, lines 47-52),

Therefore, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to combine the teachings of Ban or Bajuk with the teachings of Ogushi.

One of ordinary skill in the art would have been motivated to combine these references because Ban teaches a semiconductor manufacturing system that reduces time required to manufacture semiconductors with effective use of waiting time (abstract). Furthermore, Ban teaches yield calculations that can determine lots having low yield to be interrupted to reduce unnecessary manufacturing thereby achieving improvement in manufacturing efficiency (Col. 4, lines 1-9).

One of ordinary skill in the art would have been motivated to combine these references because Bajuk teaches a methodology for properly weighting the cost of semiconductor products (title) by casually relating costs relating to a wafer comprising resource costs, equipment costs and load factors (Abstract) wherein the process of identifying costs includes determining optional costs and verifying the weighted cost per wafer (Col. 2, lines 1-41).

*Response to Arguments*

Applicant's arguments filed March 18<sup>th</sup> 2005 have been fully considered but they are not persuasive.

31. Applicant argues that examples 3-5 in Fig. 5 and paragraphs 54-55 provide enablement for one skilled in the art to make or use inspection information obtained in regards to security of an apparatus control computer. Figure 5 shows examples of a charge calculation algorithm and pages 18-19 of the original specification further teaches that a host computer confirms a user ID, however, the examiner respectfully submits that, nowhere, in the original specification, is there any mention of how one of ordinary skill in the art can make or use inspection information obtained with regards to security of an apparatus control computer, in fact, the specification is completely silent as to even mention any security related to a user ID, much less how inspection information can be obtained with regards to security of an apparatus control computer.

Therefore the above 112 1<sup>st</sup> paragraph rejection is maintained.

32. Applicant argues that the manufacturing apparatus, inspection apparatus, and apparatus control computer may store user information. Furthermore, applicant argues that the user information is stored in the apparatus control computer. Further still, applicant leaves open the possibility that the physical memory medium can store user information. Hence, the examiner believes that it is clearly not clear what element is required (by the claim language of each claim) to store user information, –said manufacturing apparatus, said inspection apparatus, a physical memory medium, or an apparatus control computer? Therefore the above 112 2<sup>nd</sup> paragraph rejection is maintained.

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33. Applicant argues that difficulty information refers to information that denotes a degree of difficulty involved in something. Hence, the examiner believes it is clearly not clear what element is required (by the claim language of each claim) to be difficult, - the manufacturing information or the inspection information? Therefore the above 112 2<sup>nd</sup> paragraph rejection is maintained.

34. Applicant argues that either the manufacturing or inspection information may be stored. Hence, the examiner believes it is clearly not clear what element is required to store manufacturing or inspection information, - the read device or the physical memory medium? Therefore the above 112 2<sup>nd</sup> paragraph rejection is maintained.

35. Applicant argues that claim 43 has been amended to overcome the 112 2<sup>nd</sup> paragraph rejection of the term "easily". The examiner is unable to locate any such amendment to overcome this rejection in the claim. Therefore the above 112 2<sup>nd</sup> paragraph rejection is maintained.

36. Referring to claim 49, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., difficulty information which refers to the high level of accuracy required to manufacture the products; any sort of system that charges the user; any separate transmitting unit; security as a prevention of information leakage; a transmitting unit which may be a standalone server, and thus have no functional link with the manufacturing/inspection apparatus) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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37. Referring to claim 49, applicant argues that security is defined as a prevention of information leakage. The examiner is unable to locate any such explicit definition of the term security in the original specification.

38. Referring to claim 49, applicant argues that Ogushi fails to teach a physical memory medium. The examiner respectfully disagrees. The examiner respectfully submits that the database in the host computer is a physical memory medium (See Fig. 1).

39. Referring to claim 49, applicant argues that Ogushi fails to teach difficulty information. The examiner respectfully disagrees. The examiner respectfully submits that trouble is difficulty information.

40. Referring to claim 44, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a separate transmitting unit) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

41. Referring to claim 45, applicant argues that Ogushi fails to teach a transmitting unit connected to a wide area communication network. The examiner respectfully disagrees. The examiner respectfully submits that the internet is a wide area network.

42. Applicant argues that neither Ban nor Bajuk teach determining, setting, or displaying of a charge for use. The examiner respectfully disagrees.

Ban does teach determining, setting, and displaying of a charge for use in Col. 10, lines 8-63. Ban teaches determining whether or not the wafers or lot deserves to be completed in terms of the cost (i.e., calculation of cost). Ban goes on to teach a mathematical expression (i.e.,

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calculation) for making this determination in terms of cost in Col. 10, lines 40-57. Examiner respectfully submits that the sum of the costs for each step “Cp” times the yield “Yn” at the end of the nth step times the number of chips per wafer “N”, is a charge for use of the apparatus.

Bajuk also teaches determining, setting, and displaying a charge for use in the abstract, Col. 7, lines 27-68, Col. 8, lines 1-20, and Col. 11, lines 11-21. Bajuk teaches an invention that “results in more accurate costing of the entire semiconductor processing sequence” (Col. 7, lines 56-60). Bajuk even goes on to teach a calculated “cost per wafer”, for example \$8.01 (Col. 8, lines 8-10). Examiner respectfully submits that this cost (among others such as cost per step or operation also discussed in Col. 7, lines 60-68) is a cost or charge for using the apparatus, for example, on a per wafer basis.

43. Applicant argues that Ogushi fails to teach “physical memory medium in regards to security of the apparatus control computer storing user information”. The examiner respectfully disagrees. Ogushi clearly teaches the network is securely connected to the internet (Col. 3, lines 30-34 of '497) via a server (Col. 3, lines 15-29 of '497).

### *Conclusion*

**44. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571) 272-3754.

The examiner can normally be reached on 9:30am-6:00pm, M-F.

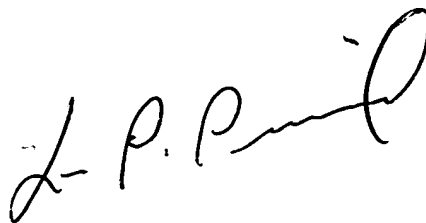
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SPS

Sean P. Shechtman

May 24, 2005

A handwritten signature in black ink, appearing to read "L. P. Picard", with a stylized flourish at the end.

**LEO PICARD**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**